

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A method for transferring data on a bus system using both isochronous communication and asynchronous communication; said isochronous communication is for any device on the bus to receive synchronous data; said asynchronous communication is for a predetermined device to receive asynchronous data; said synchronous data capable of containing actual data and encryption identification information indicating encrypted actual data; and encrypted actual data is decrypted using decrypting information obtained through the following steps:

a) receiving said synchronous data at a receiving device, and said receiving device via said asynchronous communication requesting decrypting information for said actual data from a sending device sending said synchronous data, if said encryption identification indicates encrypted actual data;

b) receiving said request at said sending device and said sending device sending one of:

i) encrypted decrypting information of said actual data; and

ii) decrypting information data for obtaining said decrypting information,

to said receiving device via said asynchronous communication; and

c) executing at said receiving device one of:

i) extracting said decrypting information from said encrypted decrypting information; and

ii) obtaining said decrypting information using said decrypting information data.

2. (Previously Presented) The method for transferring data as defined in Claim 1, wherein a plurality of procedures are available between the steps of detecting encrypted actual data and obtaining said decrypting information by said receiving device receiving said synchronous data; and said receiving device executes the following steps for obtaining said decrypting information before requesting said decrypting information:

i) querying said sending device of types of procedures executable by said sending device before requesting said decrypting information;

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ii) selecting a procedure from those executable by both said sending device and receiving device; and

iii) obtaining said decrypting information in accordance with said selected procedure.

3. (Previously Presented) The method for transferring data as defined in Claim 2, wherein a procedure is selected in accordance with a predetermined priority when there are a plurality of procedures executable by both of said sending device and said receiving device.

4. (Previously Presented) The method for transferring data as defined in Claim 1, wherein a plurality of procedures are available between the steps of detecting encrypted actual data and obtaining said decrypting information by said receiving device receiving said synchronous data; and said receiving device executes the following steps for obtaining said decrypting information:

i) starting a procedure selected from said plurality of procedures in accordance with a predetermined priority;

ii) re-selecting said procedures one-by-one until a procedure executable by said sending device is found; and

iii) obtaining said decrypting information in accordance with the selected procedure executable by said sending device.

5. (Previously Presented) The method for transferring data as defined in Claim 2, wherein said asynchronous data transmitted between said sending device and said receiving device in accordance with said selected procedure contains an identifier for indicating the type of said procedure executed.

6. (Currently Amended) The method for transferring data as defined in one of Claims 1 to 5, 16 ~~and~~or 17, wherein said receiving device authenticates whether said sending device is an authorized sending device before making a request for said decrypting information.

7. (Currently Amended) The method for transferring data as defined in one of Claims 1 to 5, 16 ~~and~~or 17, wherein said sending device receiving a request for said decrypting information authenticates that said receiving device is an authorized receiving device before sending encrypted decrypting information of said actual data.

8. (Currently Amended) The method for transferring data as defined in one of Claims 1 to 5, 16 ~~and~~or 17, wherein said sending device and said receiving device are authenticated as authorized devices before said receiving device makes a request for said decrypting information.

9. (Currently Amended) The method for transferring data as defined in one of Claims 1 to 5, 16 ~~and~~or 17, wherein the following steps are executed before said receiving device makes a request for said decrypting information:

i) said receiving device sending information required by said sending device at least for establishing a common key with said sending device; and

ii) said sending device sending information required by said receiving device at least for establishing said common key with said receiving device;

and said sending device encrypting said decrypting information using said common key and sending said encrypted decrypting information; and said receiving device extracting said decrypting information from said encrypted decrypting information received using said encryption key.

10. (Original) The method for transferring data as defined in one of Claims 1 to 5, wherein only said actual data is encrypted.

B¹ 11. (Currently Amended) The method for transferring data as defined in one of Claims 1 to 5, 16 ~~and/or~~ 17, wherein said sending device includes a signal source for said actual data and determines encryption of said actual data in a fixed length unit which is output from said signal source; and said sending device places encrypted actual data and non-encrypted actual data in different output units of said synchronous communication, and then outputs them to said bus system.

~~12-15. (Cancelled)~~

16. (Previously Presented) The method for transferring data as defined in Claim 3, wherein said asynchronous data transmitted between said sending device and said receiving device in accordance with said selected procedure contains an identifier for indicating the type of said procedure executed.

B² 17. (Previously Presented) The method for transferring data as defined in Claim 4, wherein said asynchronous data transmitted between said sending device and said receiving device in accordance with said selected procedure contains an identifier for indicating the type of said procedure executed.

18. (Currently Amended) The method for transferring data as defined in Claims 1 to 5, 16 ~~and/or~~ 17, wherein said receiving device authenticates whether said sending device is an authorized sending device before making a request for said decrypting information.

19. (Previously Presented) The method for transferring data as defined in Claim 10, wherein the following steps are executed before said receiving device makes a request for said decrypting information:

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i) said receiving device sending information required by said sending device at least for establishing a common key with said sending device; and

ii) said sending device sending information required by said receiving device at least for establishing said common key with said receiving device;

and said sending device encrypting said decrypting information using said common key and sending said encrypted decrypting information; and said receiving device extracting said decrypting information from said encrypted decrypting information received using said common encryption key.

 20. (Previously Presented) The method for transferring data as defined in Claim 11, wherein the following steps are executed before said receiving device makes a request for said decrypting information:

i) said receiving device sending information required by said sending device at least for establishing a common key with said sending device; and

ii) said sending device sending information required by said receiving device at least for establishing said common key with said receiving device;

and said sending device encrypting said decrypting information using said common key and sending said encrypted decrypting information; and said receiving device extracting said decrypting information from said encrypted decrypting information received using said common encryption key.
